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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/569,553

02/27/2006

Dario Rea

02334900316

7752

4372 7590 04/23/2008
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EXAMINER

LOW, LINDSAY M

ART UNIT

PAPER NUMBER

3721

NOTIFICATION DATE

DELIVERY MODE

04/23/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com
IPMatters@arentfox.com
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Office Action Summary	Application No. 10/569,553	Applicant(s) REA ET AL.	
	Examiner LINDSAY M. LOW	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/27/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's RCE received on February 14th, 2008.

Information Disclosure Statement

2. The Information Disclosure Statement (IDS) submitted on February 27th, 2006 is acknowledged. The IDS meets the requirements of 37 CFR 1.97 and 1.98. Therefore, the references therein have been considered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by König et al. (5,441,342).

König discloses the same invention including a rotary drum 2 positioned between the conveyor 40 and the hopper 9. Although König does not disclose a web of filter material, note that the conveyor 40 is capable of supporting a web for packaging purposes. The web is considered a work piece and does not form a part of the apparatus because it doesn't contribute to the overall function of the device. The rotary drum has a plurality of radial dosing cells 3 that is made for containing the product. Each cell has a sliding dosing piston 43 driven axially by an eccentric cam actuating device as best shown in Figs. 7 and 8. There are two positions where one faces the

hopper 9 to receive the product, while the other faces the conveyor 40 where the product is discharged. Between the cam actuating device and each piston 43 are crank means 113 and 110 as shown in Fig. 2 that enables the piston to move in a direction aligned with the longitudinal axis of the dosing cell. The crank means has a transmission shaft 111, a first crank 110, a cam follower 109, a second crank 113, and a connecting rod. The first crank 110 is connected at one end to the cam follower 109 and the other end to a shaft 111, which is attached to a second crank 113. The second crank is in turn connected to a control rod, which is linked to the piston 43 as shown in Fig. 2. The connection between the second crank 113 and the shaft 111 enables the motion between the cam means and the piston 43 (col. 9 lines 25-32).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

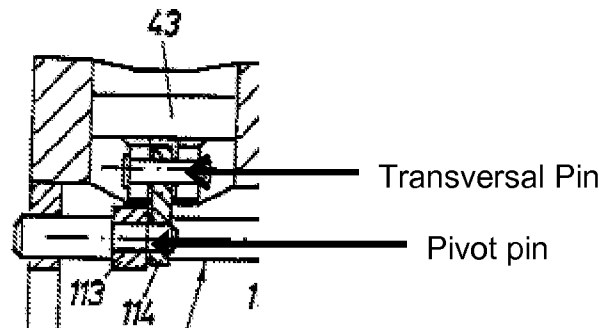
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over König et al. (5,441,342) in view of Niemi (2,163,052), Debuit (2,778,450), and McClellan et al (5,732,589).

König discloses the same invention substantially as claimed including a transversal pin mounted in a respective hole in the piston 43 (see designation below). König fails to have a second crank with a fork-shaped end having two parallel arms with

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a coaxial hole in each arm. However, the use of such configuration is well known in the art for the purpose of reducing wear to the coupling by distributing the load on the pin. Note such features in Niemi, Debuit, and McClellan. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a fork-shape to the end of Konig's second crank for the purpose of distributing the load along the pivot pin (shown below).



7. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romagnoli (4,870,808) in view of Konig et al (5,486,048).

Romagnoli discloses the same invention including a rotary drum 11 positioned between a hopper 32 and a web of filter material 2. The rotary drum has a plurality of cells as shown in Fig. 3 that hold sliding pistons 34. The pistons 34 are driven axially by a cam means (col. 5 lines 8-12). There are two positions where one faces the hopper 32 to receive the product, while the other faces the web of material 2 where the product is discharged. The cam means includes a cam track and a cam follower 35 for each piston. Romagnoli fails to disclose crank mechanisms including a first and second crank for moving the pistons in a radial direction.

However, Konig teaches a crank mechanism 44 for each piston 43 as shown in Fig. 2. The mechanism includes a first crank 110 that is connected at one end to a cam follower 109 and the other end to a shaft 111, which is rigidly attached to a second crank 113. The second crank is in turn connected to a control rod, which is linked to the piston 43 as shown in Fig. 2. The connection between the second crank 113 and the shaft 111 enables the motion between the cam means and the piston 43 (col. 9 lines 25-32). A pin 114 passes through a hole, which couples the second crank 113 to the control rod. In addition, the control rod is connected to the piston 43 using a pin that passes through a hole (Figs. 1 and 2). Konig uses this crank mechanism 44 for the purpose of causing a radial movement of each piston 43 both inwardly and outwardly in the opening (col. 5 lines 15-19). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a crank mechanism as taught by Konig for the purpose of allowing radial movement of each piston in the rotary drum.

8. Claims 7 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romagnoli (4,870,808) in view of Konig et al., (5,486,048) as applied to claims 8 and 9 above, and further in view of Niemi (2,163,052), Debuit (2,778,450), and McClellan et al (5,732,589).

The modified device of Romagnoli discloses the same invention substantially as claimed including a transversal pin mounted in a respective hole in the piston 34. The modified device of Romagnoli fails to have a second crank with a fork-shaped end having two parallel arms with a coaxial hole in each arm. However, Niemi, Debuit, and McClellan all show crank arms having fork-shaped ends for the purpose of distributing

the load along the pivot pin. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a fork-shape to the end of Konig's second crank for the purpose of distributing the load along the pivot pin (shown below).

Response to Arguments

9. Applicant's arguments filed February 14th, 2008 have been fully considered but they are not persuasive.

Applicant contends that Konig's crank mechanism does not enable the pistons to move in a direction that is perfectly aligned with a longitudinal axis of the respective dosing cell. However, as stated in the Final Rejection mailed October 17th, 2007, the fact that the piston moves longitudinally within the dosing cell shows that the piston moves in a direction that is "perfectly aligned" with its longitudinal axis. In other words, as shaft 111 rotates, second crank 113 is pivoted into the longitudinal axis of the dosing cell, thus moving the piston in a longitudinal direction that is "perfectly aligned" with the dosing cell longitudinal axis.

Applicant's arguments with respect to the "fork-shape" have been considered but are moot in view of the new ground(s) of rejection.

For the reasons above, the grounds of rejection are deemed proper.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINDSAY M. LOW whose telephone number is (571)272-1196. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. M. L./
Examiner, Art Unit 3721

/Rinaldi I Rada/
Supervisory Patent Examiner, Art Unit 3721

4/17/2008